

REMARKS

This is in response to the Official Action currently outstanding with respect to the above-identified application, which Official Action the Examiner has designated as being FINAL.

Claims 1-37 were originally presented. Claims 26-37 were elected for further prosecution and Claims 1-27 were cancelled previously, without prejudice. Claims 38-55 were subsequently added by Amendment. Thereafter, Claims 30 and 40 were canceled, without prejudice, and Claims 28, 31, 32, 35, 36, 37, 38, 41, 42, 46, 47 and 52 were amended. By the foregoing Amendment, Applicants respectfully request that Claims 28, 31, 38, 50 and 53 be further amended for clarity of expression, i.e., to emphasize that the “scroll path(es)” claimed is/are defined by preselected groupings of display elements that are disposed in a specified direction along individual line segment(s) (otherwise referred to as “intervals”), thereby placing the same in condition for allowance, or at least in better form for Appeal, pursuant to 37 CFR 1.116.

Applicants respectfully submit for reasons that will be discussed in more detail below that the foregoing claim language clearly distinguishes the present invention from the Examiner’s reliance upon the cited art, which art the Examiner alleges to disclose groupings of four line segments wherein a first two line segments are parallel to one another in one direction and a second two line segments are parallel to one another in the transverse direction to that of the first two line segments so as to form a “scroll path” comprising rectangles surrounding groupings of display elements wherein the sequence of the use (display) of the so-enclosed display elements is not specified as part of the specification of the content of the “scroll path(es)”. Hence, even if a single PDF file can be broken down in such a manner that the contents items within the rectangles are displayed can be altered according to the available display area of a display device, the art relied upon by the Examiner still has not taught, disclosed or suggested the presently claimed “scroll path(es)”

Applicants do not presently request the withdrawal or addition of any claims, and no new matter is believed to be added to this Application by the foregoing Amendment. Accordingly, in the event that the Examiner grants the entry of the foregoing Amendment, Claims 28, 31-38 and 41-47, 50 and 53-55 as hereinabove presented will constitute the claims under active prosecution in the above-identified application.

The claims of this application as they will stand in the event that the Examiner grants the entry of the foregoing Amendment are set forth in full hereinabove as required by the Rules.

More particularly, in the currently outstanding Official Action, the Examiner has:

1. Failed to re-acknowledged Applicants' claim for foreign priority under 35 USC 119(a)-(d) or (f), or reconfirm the receipt of the required certified copy of the priority documentation by the United States Patent and Trademark Office. – **These formal matters were handled in a previous Official Action in the parent of this continued prosecution application.**
2. Failed to re-confirmed that the drawings originally filed with this application on 14 September 2000 have been accepted – **The Examiner's acceptance of the drawings as filed on 14 September 2000 appears in an Official Action in the parent of this continued prosecution application;**

3. Provided Applicants with an appropriately electronically signed, dated and initialed copy of the Form PTO/SB/08a/b that accompanied their Information Disclosure Statement of 22 October 2008 in confirmation of the consideration of the art listed therein.
4. FINALLY rejected Claims 28, 31, 33-36, 38, 41, 43-46 and 48-55 under 35 USC 102(b) as being anticipated by the Portable Document Format Reference Manual and also over Saito (US Patent No. 6,599,324)
5. FINALLY rejected Claims 37 and 47 under 35 USC 103(a) as being unpatentable over the Portable Document Reference Manual, Version 1.2 in view of the Warnock reference (US Patent No. 5,634,064) and further in view of the Ota reference (Japanese Patent No. 5-323941);
6. FINALLY rejected Claims 32 and 42 under 35 USC 103(a) as being unpatentable over the combination of the Bienz and Saito references further in view of Ota (JP 5-323941)

No further specific comment regarding items 1-3 above is deemed to be required in these Remarks.

At the outset of these Remarks, Applicants respectfully note with interest the Examiner's comment at the very end of the currently outstanding FINAL Official Action wherein he states that:

Further, regarding the pending claims, the Applicants argue that the presently claimed “scroll path” is distinguished from the scroll path described by Bienz (i.e., the PDF Reference Manual). The Applicants argue that the “scroll path” of the present invention is the actual content of a prescribed path from display element to display element, not from block of display elements to block of display elements as in the PDF Reference Manual, i.e., the scroll path of the present invention is directed to the **sequential** display of words that make up the text of an article of interest(s), as opposed to the sequential display of blocks of text as in the PDF Manual. **These arguments have been considered, but are moot in view of the new grounds of rejection presented hereinabove, which are required in response to Applicants’ amendments.”** **(Emphasis Added)**

In this regard, Applicants have failed to note anywhere in the currently outstanding Official Action whereat the Examiner has responded to the argument that he himself has deemed to be moot in his present Remarks. Indeed, as will be seen below, it appears that the Examiner somehow feels that his cited art taken in combination allows him to construe each separate file of the Saito reference, for example, to be a single display element along with its associated management and display information in the PDF Reference Manual form. Applicants respectfully submit that this extreme interpretation is beyond the teachings, disclosure or suggestions of the cited art and constitutes at best a hindsight reconstruction of the Saito and like references that attempts to recreate Applicants’ claimed invention with the aid of the hindsight knowledge of Applicants’ disclosure.

Thus, as far as Applicants have been able to understand the Examiner’s position as stated in the currently outstanding Official Action, the Examiner has not satisfactorily dealt with the foregoing so-called moot argument either as argued by Applicants in their last submission or as clarified further by the above-Amendment.

Hence, it will be seen below and throughout the currently outstanding Official Action that the Examiner has taken apparently divergent positions regarding what the “scroll path” as defined in the present claims is relative to the elements of the cited art upon which he relies. Applicants, on the other hand, respectfully submit that the “scroll path” of the present invention is distinctly different from the scroll paths discussed by the Examiner with respect to the cited art. Thus, the presently claimed scroll path is simply not the same as the “scroll path” created by the Examiner in his combination of references for the purpose of defeating the patentability of the present invention. Indeed, Applicants respectfully submit that the scroll path herein claimed is neither taught, disclosed nor suggested by the art upon which the Examiner relies. Consequently, Applicants respectfully submit that the Examiner’s position is still *prima facie* insufficient to defeat the patentability of the presently claimed invention.

For example, at lines 5-6 of page 5 of the currently outstanding Official Action, the Examiner indicates that “...a thread is considered a scroll path along which scrolling through a document is to be conducted”. Applicants do not agree. At best a “thread” as defined in the PDF Reference Manual acts like a vector in the present invention in that it operates to connect one end of one portion of a rectangle defining a portion of the scroll path to the start of another rectangle defining another portion thereof. In other words, the “threads” are not equivalent of the presently claimed “scroll path”.

Furthermore, the last full paragraph on page 5 of the currently outstanding Official Action is instructive on this point because the Examiner again mixes up the teachings and disclosures concerning the Bienz “thread” with those of the present specification concerning what the “scroll path” is. Accordingly, it will be seen that in that paragraph, the Examiner states:

Bienz thus presents a pre-specified unit of display data (i.e., a PDF file), which includes (i) a series of display elements (e.g., graphic objects) for display by the display device, and (ii) management elements associated with the display elements the management elements including all of the information necessary for the display device to display a predetermined sequence of said display elements as a scroll display, and wherein the predetermined sequence of the display elements includes an interval (i.e., bead) or intervals that sequentially together form a scroll path (i.e., thread – *Applicants disagree with the Examiner's use of the term "thread at this point of his discussion*), each interval being specified by line segments defined by coordinate values of a starting point and an ending point in a coordinate system defined by the prespecified unit corresponding to coordinate values assigned to the display elements in the prespecified unit, as claimed **Bienz, however, does not explicitly disclose that the display elements forming the intervals defining the scroll path are respectively sequentially displayed from the starting point to the ending point thereof as the scroll path is displayed by the display device, as required by Claims 28 and 38. Moreover, Bienz fails to explicitly disclose that the plurality of such prespecified units, i.e., PDF files, may be used together to define a single complete document, as expressed in Claims 28 and 38.**

See also Page 9 of the currently outstanding Official Action whereat the Examiner has stated in the only full paragraph that "...Each bead includes an R parameter, which as shown above, delineates specific document content by means of four coordinate values (*two sets of parallel line segments as the Examiner described elsewhere in the current Official Action*) these coordinates defining a rectangle about the content. The beads are linked into a common thread so that the user may scroll **from bead to bead** in order to read an entire article, whereby each bead, the content bounded by this rectangle is displayed at an appropriate zoom level....Thus, the scroll display control information taught by Bienz includes information, specifically the rectangle identified by the R parameter, which intrinsically specifies a scale of enlargement or reduction of the display area for scroll display." (based upon the size and configuration of the available display device screen).

Thus, according to the Examiner, the “scroll path” has several different meanings, namely: the “thread” of the PDF Reference Manual, a sequence of display elements, or an interval (bead) or intervals (beads) that include display elements that may or may not be displayed sequentially, among other potential definitions. As will become more apparent below, this imprecise and divergent series of definitions of what exactly constitutes a “scroll path” in the present invention versus the prior art relied upon by the Examiner is respectfully submitted to be demonstrative of the Examiner’s failure to adequately support his allegations concerning the unpatentable nature of the present claims of this application. Applicants respectfully submit that the problem here may reside in the Examiner’s erroneous conceptualization that the “thread” is somehow part of an equivalent of the claimed “scroll path”. Applicants agree that the “thread” might be likened to the vectors of the presently claimed “scroll path” even though they connect the actual elements of the “scroll path” only in rectangular groups of individual display elements without any direction as to the sequence in which thus various display elements are to be displayed along the “scroll path”.

Despite the foregoing imprecise definition of a scroll path, the Examiner nevertheless attempts to summarize the position that he is taking at page 7 of the currently outstanding Official Action whereat he states that:

Accordingly, it would have been obvious to one of ordinary skill in the art having the teachings of Benz, Warnock and Saito before him at the time that the invention was made to implement the PDF format taught by Bienz and Warnock to create a plurality of PDF files, each describing a single portion of a document like Saito. It would have been advantageous to one of ordinary skill to utilize such a combination because it would allow the user to specify different access rights for different portions of the document as suggested by Saito. Accordingly, Bienz, Warnock and Saito are considered to teach one of ordinary skill in the art a data storage medium (i.e., computer memory) like that of Claim 28 which is for use with a display device, the data storage medium having recorded thereon a plurality of pre-specified data units (i.e., PDF files) that together define a single complete document

recorded thereon. Similarly, Bienz, Warnock and Saito teach a data storage medium like that of Claim 38 the data storage medium having a display associated with a single complete document recorded thereon the display data including a plurality of image data objects for display on a display screen of a display device and all management information associated with each of the image data objects required by the display device for scroll display, thereof.

It is Applicants' belief that it is substantially correct to define the structure represented by the PDF Reference Manual as being a "thread" or "threads" that link one or more "beads" so that a user may read an entire article by scrolling from one article bead to the next along the thread, rather than from one page to the next. Further, Applicants agree that each "bead" in the PDF Reference Manual context includes an "R" parameter that defines a page location on which is located its associated article content. Hence, as the Examiner has suggested this page location is specified in a coordinate system according to the coordinate values assigned to the article content, since the "R" parameter is denoted by 4 values that identify the coordinates of the corners of the rectangle surrounding the associated article content **starting at the upper right and ending at the lower left corner of the rectangle (contrary to the normal way in which the English language is read – noting that nothing determines for the user the sequence in which the display element content of the respective beads is to be read even if it is displayed line by line according to some sort of undefined interpretation of Warnock display scheme).**

Thus, as the Examiner has suggested, and Applicants agree, that the respective PDF "beads" are each specified by a rectangle (i.e., two sets of line segments having different directions in a coordinate system – two parallel line segments extending in a first direction and two parallel line segments extending in a second transverse direction relative to the first line segment pair – **not individual line segments each having a line segment starting point and a line segment ending point as now claimed.**

Furthermore, Applicants agree that in the PDF Reference Manual context each “bead” has an associated “T” parameter, “V” parameter and “N” parameter that effectively define the “thread” on which the “bead” belongs in terms of the previous and subsequent “beads” located along that “thread” relative to the present “bead”. Applicants do not however agree that this fact in any way establishes that the PDF Reference Manual “thread” in any way, shape or manner qualifies as a “scroll path” as herein claimed. As indicated above, the “thread” of the PDF Reference Manual acts only like the vectors in the present invention in operating to interconnect various portions of the “scroll path” with one another whether the “scroll path” be a series of beads as in the PDF Reference Manual or a series of display elements read in a specified sequence defines by a line segment(s) as herein claimed.

Hence, Applicants can agree that the “beads” of the PDF Reference Manual are linked to common threads such that a user may scroll the PDF Reference Manual “beads” in a sequence defined by the thread (i.e., article to article section) in order to read an entire article, but **does not** thereby admit that the “threads” of the PDF Reference Manual are in any fashion the same as, or equivalent to, the presently claimed “scroll path” (i.e., the display elements in the sequence of the various line segments interconnected by the claimed vectors as herein claimed).

Also, as quoted above, the Examiner incorrectly asserts that “Consequently, as the thread is formed by a plurality of “intervals”, namely “beads”, which are specified by line segments having different directions in a coordinate section defined by a PDF file, a thread is considered to be a scroll path along which scrolling through a document is to be conducted.” **Applicants do not agree**. The “threads” are not made up of the “beads” in the PDF Reference Manual. Rather, the threads are indications of the sequence in which the various beads should be read.

Accordingly, in the PDF Reference Manual context there are no “intervals” as herein claimed. Instead, the “scroll path” is the path that defines the sequence in which the content elements contained in each of the respective beads in the defined sequence thereof are to be read (without any provision defining the sequence in which the various contents elements disposed in each sequential bead along the thread are to be read as in the present invention - the latter concept not finding any comparable feature in the PDF Reference Manual or any of the other art relied upon by the Examiner).

Accordingly, as the Examiner himself has realized, his statement to the effect that “ ...the predetermined sequence of the display elements (*in the PDF context*) includes an interval (i.e. bead) or intervals that sequentially together form a scroll path (i.e., “thread”), each interval being specified by line segments defined by coordinate values of a starting point and an ending point in a coordinate system defined by the prespecified unit corresponding to coordinate values assigned to the display elements in the pre-specified unit, as claimed.” is not exactly correct. In particular, the Examiner recognizes that the PDF Reference Manual does not explicitly disclose that the display elements forming the intervals defining the scroll path are respectively **sequentially** displayed from a line segment starting point to a line segment ending point as the content of the defined intervals of the scroll path is displayed by the display device.

The Examiner, however, again attempts to avoid the foregoing difficulties in his rejections the present claims based upon the PDF Reference Manual alone by resort to the Warnock and Ota references in combination with the Saito reference. Applicants respectfully submit, however, that the Examiner’s efforts still have not risen to the level of a *prima facie case* in support of his rejections under 35 USC 103(a).

For example, the Examiner has relied upon the Saito reference for the proposition that it would be obvious to one of ordinary skill in the art to break a single PDF file down into multiple PDF files because such would allow different access rights to be specified for different portions of a document. Applicants do not dispute the concept of Examiner's specific point in this regard, but nevertheless, respectfully point out that the Examiner's reasoning appears to have come full circle from the position that it would have been obvious to combine individual files into a single PDF file via the logic of a Mastie reference to the point of dividing up a single PDF file into multiple individual PDF files by the logic of Saito. As was previously discussed and will be again discussed below for the sake of completeness, one skilled in the art would never have combined the individual files into a PDF at all in the first place if the ultimate point was to be to break down that PDF file into small individual PDF files each with its own data and formatting information.

More particularly, as previously stated, Applicants respectfully reiterate that the Examiner has indicated previously that "one could compose a document stored amongst a plurality of PDF files; he or she would simply store various portions of the document as distinct PDF files, i.e., write a portion of the document and store it as one file, write another portion of the document and store it as another file, etc. In such circumstances, the storage medium storing all the files would be a data storage medium having a plurality of pre-specified data units (i.e., PDF files) that together define a document thereon like claimed." Applicants in response submitted that the Examiner's attempt to modify the basic concept of a PDF file in this manner is not proper and should be overturned in view of its hindsight method of analysis.

Furthermore, also as previously mentioned, according to Section 2143.01 (III) of the Manual of Patent Examining procedure (MPEP), it is settled law that “[t]he mere fact that a reference can be combined or modified does not render the resultant combination obvious unless the prior art suggests the desirability of the combination”. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990) Also, it is impermissible simply to engage in hindsight reconstruction of the claimed invention, using applicant’s structure as a template and selected elements from the references to fill the gaps. *In re Gorman*, 18 USPQ2d 1885 (Fed. Cir. 1991)

Further still, Section 2143.01(VI) of our Manual of Patent Examining Procedure makes it abundantly clear that in order for a disclosure of a reference to conform with the standards for the establishment of a *prima facie* case supporting a rejection under 35 USC 103, the proposed modification of the prior art embodied in a claim of an application cannot change the principal of operation of the prior art reference being applied. In other words, if the proposed modification or combination of the prior art relied upon by the Examiner would change the principal of operation of the prior art invention being modified in an attempt to reach the present invention, then the teachings of the combined references are not sufficient to establish a *prima facie* case of obviousness under the appropriate stands for the same. *In re Ratti*, 280 F.2d 810, 123 USPQ 349 (CCPA, 1959)

In view of these Rules and precedents, Applicants have previously (and still) respectfully submit that the Examiner has expanded of the definition of a PDF file to the extreme of being the same as a pre-specified data unit like herein claimed and this appears to clearly be an attempt to modify the principals of operation of a PDF file that is improper under the above standards.

As was mentioned in Applicant's previous submissions in this prosecution, the alternative of combining a plurality of individual PDF files so as to make up a complete document and thereafter reformatting the same so as to conform with one another in the manner contemplated by Mastie is a concept that is nowhere disclosed, taught or suggested in the art and is an idea which the Applicants respectfully submit makes very little sense and would not be expected to be a path adopted by one of ordinary skill in the art. Instead, Applicants respectfully submit that it would be expected that one skilled in the art would simply create a single PDF file from the beginning wherein the page objects of each page were utilized in conjunction with the common formatting of a typical PDF document. In other words, it would make very little sense to one of ordinary skill in the art to create and store a plurality of individual PDF page files for the purpose of forming a document and thereafter to reformat those stored individual PDF page files into a single combined document having a single PDF document format. Clearly, it would make more sense to create a basic PDF document shell and incorporate the page object data therein such that it all would have the same formatting from the outset.

Also as mentioned, the theoretical possibility of the combination of a plurality of individual PDF files that each define a document (i.e., a plurality of documents) stored separately so as to make up a document postulated by the Examiner as meeting the limitations of the present claims has not been shown to have been adopted in, or even seriously considered by, the art even though the components thereof have been readily available for some time. Applicants respectfully submit that the reason for this is that one of ordinary skill in the art simply would not make the combination postulated by the Examiner for the reasons discussed above.

Indeed, the Mastie reference, now stated to be unnecessary to his rejections by the Examiner, is a clear indication of the art's tendency to move toward the concept of common formatting for all of the files making up a document that is manifest in the PDF Reference Manual. Further, as will appear in more detail below, the Examiner's insistence upon a reliance upon the thread and bead concepts of the PDF Reference Manual regarding the scrolling capabilities provided by the plurality of individual PDF files that he has postulated as making up a document as being comparable to the present pre-specified data units **appears to totally disregard of the comments presented at pages 30-31 of Applicant's Amendment After Final Rejection originally filed on 27 September 2006 as well as the comments appearing at pages 25-28 of Applicants' Amendment of 13 August 2007) regarding the correct interpretation of "scrolling", "intervals" and the phraseology placed into the currently pending claims with respect to the same (quoted below for convenience of reference).**

In other, words, the Examiner's outstanding rejections require an improper modification of the principals of operation of the PDF document format in order for the Examiner's currently outstanding rejections to make sense. Applicants respectfully submit that this is not proper.

Furthermore, Applicants previously have **submitted amendments calculated to clarify (1) the scroll path of the present invention is the actual content of a prescribed path from display element to display element; and (2) that the present invention does not require the scroll display itself to be initiated at the starting point and progress to the end point claimed with respect to the prespecified data units/distinct files herein claimed as opposed to being capable of running not only within the prespecified data units, but also between the same.**

Applicants respectfully re-emphasize that one can never lose sight of the fact that the PDF system is different than that of the system of the present invention at least in that the PDF system contemplates that the management information for all of the various data files, groups or the like is centrally stored such that multiple data units are controlled by the same management information. As has been explained elsewhere, the PDF concept has advantages in some cases, but the very features that provide those advantages in those cases act to distinguish the present invention from the PDF system.

Accordingly, it will be recalled that the intervals forming a scroll path in the present invention are specified by line segments respectively defined by coordinate values of a line segment starting point and a line segment end point according to coordinate values assigned to the display elements in the pre-specified unit (not the content of defined rectangles without direction as to how that content is to be presented to and/or read by user). More particularly, despite the Examiner's detailed analysis of the Portable Document Format Reference Manual, the fact remains that present invention stores the display data associated with each data grouping together with its associated management information, rather than in a form dependent upon selections from the catalog of display and formatting functions (management information) stored for the entire document as is done in a PDF document file.

This display data includes image object data, management information associated with each stored image object data and scroll information associated with each image object data, in distinct, separately controllable pre-specified units (i.e., distinct files) containing only a portion of all of the display data associated with a document to be stored on the storage medium and in direct association with the management information specifically associated therewith.

Also, despite the Examiner's attempts to infer otherwise, this is different from the so-called dynamic formatting referred to by the Warnock, et al. reference as being unsatisfactory as well as being different from the disclosures of the Portable Document Format Reference Manual. In both of those references it is necessary to store the **entire document or the like** in a computer memory as a so-called "PDF (Portable Document Format) document" before any portion ("pre-specified data unit") can be accessed or displayed.

Applicants therefore again respectfully submit and emphasize that a close reading of the PDF Manual clearly suggests that while the Examiner's factual analysis concerning the "bead" concept of identification of article segments and the page co-ordinate definition of each article segment may seem to be supported by the PDF Manual, the Examiner has forgotten (or not noticed) that ***no matter how one approaches the PDF format, it is necessary in the use of each page, or article portion thereof to refer back to information stored as part of the whole PDF file outside of the so-called "page objects" (Note: the PDF Reference Manual discusses PDF files as representative of entire documents including a header, a body, a cross-reference table and a trailer (see chapter 5) wherein the body is made up of various indirect objects such as fonts, pages and sampled images, see page 62).***

Thus, despite other similarities to the present invention, in the article and/or page context, the PDF Reference Manual makes it clear that each selected portion of a so-called "page" that is defined by the so-called "beads" must refer back to the so-called "Contents" parameter of the "page" of which it forms a part. Hence, each article portion must refer back at least to the page information from which it is extracted in order to be appropriately utilized in a scrolling display of an entire article (particularly an entire article having different portions on different pages).

In fact, while it is possible to create PDF units containing one or more separate document pages, there is no provision in the PDF format for saving the data and management information representing defined article segments as separate pre-specified units (Claim 28) or distinct files (claim 38).

Further, while as has been mentioned and discussed in great detail elsewhere in this prosecution, the PDF Manual at certain points seems to broadly suggests that each so-called “page” may be basically separate unto itself as an abstract concept, **the true, real world fact is that at least part of the display information and associated scroll information for each such page depends upon information created and saved in the body portion of the PDF file separately from the page objects (data) in question during the course of the creation and saving of an entire PDF format type document.**

Consequently, the pre-specified units of the present invention to the extent that they may individually represent pages or article portions contain within themselves all of their own display information, including scroll display control information. The PDF Document Format, on the other hand, does not contemplate that each so-called “page” is to be a pre-specified unit in the sense of the present invention. This is because the display control including scroll display information (for example, the required drivers) are embedded in the PDF file and associated with the data to be displayed by higher level operators associated with the data via catalogs that assemble the various objects making up the body of the PDF file to achieve the desired complete document display.

Thus, while the PDF Reference Manual at first reading appears to be discussing the manipulation of documents, pages of documents and article threads running through the documents, a more detailed reading of that manual indicates that the foregoing is but the highest level of explanation of the actual PDF concept. ***This is readily apparent to anyone who has used a PDF document obtained from an outside source from the fact that the entire document has to be downloaded and processed by the computer involved before any part of the PDF document can be accessed for use.***

When reduced to its basics, therefore, Applicants respectfully submit that the PDF concept stores “documents” in the form of “pages” (i.e., groups of page objects) separately from at least some of the data contemplated as being necessary for display of the individual image data (page objects), and separately from all of the other information necessary for the association of that image data (“page objects) in the form of appropriate control sequences including the parameters required to achieve the association and control of the display of various combinations of the image data (“page objects”) as desired.

Perhaps most importantly regarding the currently outstanding rejections, Applicants respectfully refer the Examiner to pages 81-97 of the present specification whereat it is explained that the arrows located in the Partial Blocks identified in Fig. 37 within the respective pre-specified display units are the “intervals” that together form a “scroll path” of the display element content along which said scroll display is to be conducted in the present invention and the method by which that is accomplished is explained.

In other words, the "scroll path" in the present claims is the path made up of the sequential display of the actual display elements that are to be displayed, not the path connecting rectangles surrounding various portions of an article content to be displayed together as a group simultaneously according to their respective positions along the "scroll path" (or thread) of the PDF Reference Manual that is not the same as the scroll path of the present invention. (See present specification at page 89, line 24 to Page 92, line 18)

To clarify the latter point, the claims of this application were previously amended so as to clearly indicate that the "intervals" as herein claimed refer to portions of the actual display element content that together make up a "scroll path" that defines the display element content of the respective pre-specified display data units or portions thereof that are to form the actual content of the "scroll display" (i.e., the predetermined sequence of data elements)". Thus, each "interval" in the present invention has a direction associated with it, and some or all of those directions may be the same or different depending upon the particular scroll path (data content) to be displayed. Accordingly, the portion of the present invention that links the "intervals" with one another is part of the information for selecting among the display elements for scroll display to be found in the "predetermined sequence" in which the display elements are displayed. Further, as now clarified, the information for selecting among the display elements for scroll display linking the "intervals" may take the form of information specifying vectors associated with the content of the pre-specified units or distinct files herein claimed.

Accordingly, in addition to the reasons discussed above that distinguish the present invention from the disclosure of the PDF Reference Manual, Applicants respectfully submit that the present invention is clearly and unambiguously distinct from any and/or all of the art cited by the Examiner taken alone, or any combination, by the fact that the “scroll path” hereinabove claimed is a scroll path defined by “a line segment starting point and a line segment end point in a coordinate system defined by said pre-specified unit according to coordinate values assigned to the display elements in said pre-specified unit” (i.e., the coordinate system used to define the scroll path is the coordinate system defined by the pre-specified unit itself and the intervals are the directors that establish the scroll path from each piece of data to the next). This is to be distinguished from a scroll path of the PDF Reference Manual that is alleged by the Examiner to be defined by “a start point (i.e., an upper right corner) and an end point (i.e., a lower left corner) – see Official Action at page 5, line 11-14).

Thus, the “R” parameter referred to by the Examiner in this regard defines a region (a location of a bead within the coordinate system of the document) not the “interval” herein claimed as discussed above. Hence, it will be understood that it is nowhere described in the PDF Reference Manual that scroll display is to be initiated at the upper right corner specified by the “R” parameter as one of the corners of the block (a starting point) of display data constituting the associated “bead”. Instead, in the PDF environment, the various portions or sections of a document defined by the “R” parameter are displayed simultaneously as groups (blocks) wherein 4 values identify the coordinate values of the corners of a rectangle surrounding the associated simultaneously displayed article content in a coordinate system assigned to the content of the entire document of which those portions form a part by the PDF file as described in the PDF Reference Manual.

It is to be noted in the latter regard again that while the Examiner would like to say that each pre-specified unit is a PDF file, the fact is that as discussed above even if the situation starts out with each pre-specified unit being a separate PDF file, when those files are combined to make a single document (as now specifically claimed) they lose their individuality due to the necessity for common formatting as discussed above with regard to Mastie. Thus, the scrolling of the present invention is from element to element within each pre-specified unit while the scrolling in the PDF environment is from block to block as defined by the “R” parameter in the coordinate system of the entire document, not the coordinate system within the pre-specified unit as herein claimed.

Perhaps more clearly and distinctly stated, the “scrolling” of the present invention is directed to a “scroll path” formed within the actual display element content in the present specification and claims rather than to a scroll path constituting “beads” defining blocks of simultaneously displayed element data joined by “threads” leading sequentially from one bead to the next. Accordingly, it will be understood that the “scroll path” as defined and contemplated by the present invention delineates the actual display content obtained by scrolling with the gaps therebetween delineated by vectors (links) pointing to the next sequential portion of the actual display data. Accordingly, the “scroll path” contemplated by the present specification and claims is not a series of blocks (“beads”) of data that are each to be presented to the user simultaneously as units (separate blocks) intermittently so as to be readable by a user in a sequence determined by so-called “threads” connecting the various “beads” as in the PDF Reference Manual disclosure. Rather, the “scroll path” of the present invention is the actual content of a prescribed path from display element to display element, not block of display elements to block of display elements as in the PDF Reference Manual context.

Hence, the sequential display of blocks of text that make up an article of interest is not the same as the sequential display of the words that make up the text of the article of interest. In the one the blocks of information are presented simultaneously as a group for the use of the user intermittently so as to provide the user with time to read the same, in the other, the sequence of use and the speed of the presentation of the content of the article is predetermined for the user and presented in the sequence in which it is to be used at a predetermined speed.

Applicants respectfully submit that the foregoing concepts (that are believed to be clearly determinative of the distinct differences between the present invention and the PDF Reference Manual disclosure) have been totally disregarded (or not recognized) by the Examiner heretofore during this prosecution. In addition, Applicants respectfully submit that the Examiner cannot avoid the logical conclusions that are derived from the foregoing simply by reference to the fact that the Warnock reference contemplates that the simultaneously displayed blocks that form the scroll path of the combination of references referred to by the Examiner may have to be scanned and panned such that they are displayed within the available screen area in a sequence starting from the top of the block to the bottom thereof or vice versa according to the available screen area and the format selected for the display.

In other words, the Examiner correctly has noted that the simultaneous available display of the content of each block of the scroll path of the combination of references relied upon to defeat the patentability of the present invention may not always be possible in view of the available screen areas for that display.

In that case, as noted above, the Warnock reference suggests that all of the information concerning a respective block (including its display content and its management information) will be made available simultaneously. Thereafter, according to the available size of the display screen and the format adopted for the display of the display content contained within the block, Warnock indicates that the simultaneously available area of the block may be actually be displayed starting either at the top or the bottom of the available display content and panned either down or up until the entire block area has been projected onto the screen. The Examiner suggests that this is indicative of the same thing as the sequential scrolling of the content data along the line segment in the direction specified by the present claims. Applicants cannot agree with the Examiner's latter point either.

The problem with the Examiner's reasoning in the above regard is that it assumes that the Warnock reference is capable of providing a directionality and a sequentially to the scroll path of the PDF Reference Manual/Saito combination that Applicants have demonstrated above to be faulty in terms of the equivalence of the scroll path of each above. Thus, it will be understood that in the present invention the scroll path runs from content element to content element along each line segment in a defined sequence, but in the combination postulated by the Examiner such is not the case. Thus, in the combination postulated by the Examiner the user is presented with an area corresponding to a block containing various content information with the desire of displaying the entire block to the user on a screen of a prespecified size.

Depending upon the relative sizes of the block defined area and the screen area as well as the format selected for the display on the predetermined screen area, Warnock recognizes that it may not always be possible to display the entire available quantum of content data at the same time and elects to display the same starting from a top or bottom section and thereafter panning down or up as appropriate until all of the available data elements as they appear in the block have been presented to the user. The Examiner suggests that this is a disclosure of the sequential scrolling of the content data as in the present invention, but Applicants cannot agree.

In particular, in the combination proposed by the Examiner an entire block of content data is available simultaneously rather than individual items of content data being available for display sequentially. This is the result of the distinctions between the scroll path of the present invention and the scroll path of the combined references relied upon by the Examiner and discussed at length above. Furthermore, it is this feature of the present invention that allows the present invention to display the contents elements "as they sequentially appear along the scroll path" instead of displaying the area of each successive block of the scroll path of the combination postulated by the Examiner in the most easily viewed fashion (without any guidance from within the system as to the sequence in which the content elements contained in the block should be displayed – for example, the English language is read from left to right and top to bottom thereby suggesting one way in which the simultaneously available images of the content elements contained within a block might be scanned onto the screen, but other languages and/or data might be better displayed in a different sequence or manner.

Accordingly, Applicants respectfully submit that the Warnock disclosure of a panning of a simultaneously available image of the content data contained in a block is not the same as, and does not teach, disclose or suggest the sequential display of the content elements made sequentially available relative to one another in a sequential scroll path such as that herein claimed.

In view of the foregoing Amendment and Remarks, therefore, it is respectfully submitted that all of the claims that will be present in this application upon the entry of the foregoing Amendment now are in condition for allowance. Accordingly, entry of the foregoing Amendments, reconsideration and allowance of this application in response to this communication are respectfully requested.

Applicants also believe that additional fees beyond those submitted herewith are not required in connection with the consideration of this response to the currently outstanding Official Action. However, if for any reason a fee is required, a fee paid is inadequate or credit is owed for any excess fee paid, you are hereby authorized and requested to charge and/or credit Deposit Account No. **04-1105**, as necessary, for the correct payment of all fees which may be due in connection with the filing and consideration of this communication.

Respectfully submitted,

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SIGNATURE OF PRACTITIONER

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